

AMENDMENTS TO THE CLAIMS

1-19. (Canceled)

20. (Previously presented) A wireless cellular communication network for providing wireless communication to a plurality of user equipments (UEs) comprising:

- a plurality of network cells;
- a first remote emitter assigned to a first one of the plurality of network cells;
- a second remote emitter assigned to a second one of the plurality of network cells;
- a first base station assigned to the first network cell;
- a second base station assigned to the second network cell;
- the first base station is arranged to directly receive uplink communication signals from a first one of the plurality of UEs that is located in the first network cell, the first base station is further arranged to indirectly send downlink communication signals to the first UE via the first remote transmitter; and
- the second base station is arranged to directly receive uplink communication signals from a second one of the plurality of UEs that is located in the second network cell, the first base station is further arranged to indirectly send downlink communication signals to the second UE via the second remote emitter.

21. (Previously presented) The wireless cellular communication network of claim 20, further comprising a first managing tool assigned to the first network cell, wherein the managing tool dynamically and independently controls assignments of the uplink and downlink communication signals to the first base station and the first remote emitter.

22. (Previously presented) The wireless cellular communication network of claim 21, wherein the first managing tool further controls an assignment of uplink communication signals as directly received by the second base station from a third one of the plurality of UEs that is located in the second network cell.

23. (Previously presented) The wireless cellular communication network of claim 22, wherein the first management tool is implemented at the first base station.

24. (Canceled)

25. (Previously presented) The wireless cellular communication network of claim 20, further comprising a downlink managing tool that determines availability of the first remote emitter for downlink registration or access of the first UE.

26. (Previously presented) The wireless cellular communication network of claim 20, further comprising a managing tool that controls availability of the second base station to receiving uplink communication signals from the first UE.

27. (Previously presented) The wireless cellular communication network of claim 25, wherein the downlink managing tool determines the availability of the first remote emitter for downlink registration or access of the first UE based at least on performance metrics of the first remote emitter.

28. (Previously presented) The wireless cellular communication network of claim 25, further comprising a first communication link between the first base station and the first remote emitter, wherein the downlink managing tool determines the availability of the first remote emitter for downlink registration or access of the first UE located in the first network cell based at least on health metrics of the first communication link.

29. (Previously presented) The wireless cellular communication network of claim 25, wherein the downlink managing tool determines the availability of the first remote emitter for downlink registration or access of the first UE located in the first network cell based at least on performance metrics of the first base station.

30. (Previously presented) The wireless cellular communication network of claim 20, further comprising:

a first communication link between the first base station and the first remote emitter; and
a downlink managing tool that determines availability of the first remote emitter for downlink communication with the first UE based at least on a performance metric of the first remote emitter, a performance metric of the first base station, and a health metric of the first communication link.

31. (Previously presented) A method for increasing user capacity and coverage area of a wireless communication network comprising:

detecting first uplink communication signals directly from a first user of the network;
assigning the first user to a first designated area of the network;
directly receiving the first uplink communication signals from the first user to a base station ;
processing the first uplink communication signals at the base station;
detecting second uplink communication signals directly from a second user of the network;
assigning the second user to a second designated area of the network;
directly receiving the second uplink communication signals from the second user to the base station;
processing the second uplink communication signal at the base station;
preparing downlink communication signals at the base station for transmission to the second user ;
assigning a remote emitter to the second designated area of the network or the base station;

indirectly transmitting the downlink communication signals from the base station to the second user via the remote emitter.

32. (Previously presented) The method of claim 31, further comprising:
determining whether to use the base station or the remote emitter for transmission of the downlink communication signals to the second users based on predetermined criteria; and
the indirectly transmitting the downlink communication signals comprises indirectly transmitting the downlink communication signals from the base station to the second user via the remote emitter based on the determining.

33. (Canceled)

34. (Original) The method of claim 31, further comprising:
providing a communication link between the base station and the remote emitter.

35. (Previously presented) The method of claim 31, wherein the predetermined criteria comprise:

predetermined loading conditions of the remote emitter and the base station.

36. (Canceled)

37. (Original) The method of claim 34, wherein providing a communication link between the base station and the remote emitter comprises:

routing signals between the base station and the remote emitter via an IP network.

38. (Previously presented) The method of claim 31, wherein the downlink communication signal comprises a digital signal, and remote emitter comprises a digital-to-analog converter for converting the digital downlink communication signals into analog signals for transmission to the second user.

39. (Previously presented) The method of claim 38, wherein the remote emitter further comprises an integrated power amplifier and high power RF antenna device for transmitting the analog downlink communication signals to the second user.

40. (Original) The method of claim 39, wherein the integrated power amplifier and high power RF antenna device is implemented as a multilayer printed wiring board package.

41. (Canceled)